

LIT-114/AME 1412

**CLAIM AMENDMENTS****RECEIVED  
CENTRAL FAX CENTER****OCT 02 2006**

1           1.       (Currently amended) A system, comprising:  
2           a first communication node of a plurality of communication nodes connected with  
3       processorless central equipment, wherein the first communication node sends one or  
4       more first portions of node-output information to the processorless central equipment,  
5       and wherein the first communication node has one or more instances of a data interface  
6       and a video interface ~~is not limited to a telephone~~, and wherein the first communication  
7       node and the processorless central equipment communicate through employment of a  
8       time division multiplexing format; and  
9           wherein one or more additional communication nodes of the plurality of  
10       communication nodes send one or more additional portions of node-output information  
11       to the processorless central equipment; and  
12           wherein the first communication node receives from the processorless central  
13       equipment a portion of central-output information, and wherein the portion of central-  
14       output information comprises the one or more first portions of node-output information  
15       and the one or more additional portions of node-output information.

1           2.       (Currently amended) The system of claim 1, wherein the first  
2       communication node sends the one or more first portions of node-output information to  
3       the processorless central equipment in a communication frame; and  
4           wherein the first communication node receives from the processorless central  
5       equipment the portion of central-output information in the communication frame.

LIT-114/AME 1412

1           3.     (Previously presented) The system of claim 1, wherein the first  
2 communication node sends the one or more first portions of node-output information to  
3 the processorless central equipment no later than an interval before a start of a  
4 communication frame in which the first communication node receives from the  
5 processorless central equipment the portion of central output information, and wherein a  
6 time duration of the interval is substantially small relative to a time duration of the  
7 communication frame.

1           4.     (Previously presented) The system of claim 3 in combination with a  
2 second communication node of the one or more additional communication nodes,  
3 wherein the second communication node sends one or more of the one or more  
4 additional portions of node output information to the processorless central equipment no  
5 later than the interval before a start of a communication frame in which the second  
6 communication node receives from the processorless central equipment the portion of  
7 central output information, and wherein the communication frame in which the first  
8 communication node receives from the processorless central equipment the portion of  
9 central output information and the communication frame in which the second  
10 communication node receives from the processorless central equipment the portion of  
11 central output information comprise the same time duration.

LIT-114/AME 1412

1           5.     (Currently amended) The system of claim 1, wherein the first  
2 communication node sends one of the one or more first portions of node-output  
3 information to the processorless central equipment within an interval before a time slot  
4 of a communication frame of the portion of central-output information, and wherein a  
5 time duration of the interval is substantially small relative to a time duration of the  
6 communication frame; and

7           wherein the first communication node receives from the processorless central  
8 equipment the one of the one or more first portions of node-output information in the  
9 time slot of the communication frame of the portion of central-output information.

1           6.     (Currently amended) The system of claim 5, wherein the time slot  
2 comprises a pre-assigned time slot of a set of time slots that comprises the  
3 communication frame of the portion of central output information; and

4           wherein the first communication node sends one of the one or more first portions  
5 of node-output information to the processorless central equipment within the interval  
6 before the pre-assigned time slot of the set of time slots that comprises the  
7 communication frame of the portion of central-output information; and

8           wherein the first communication node receives from the processorless central  
9 equipment the one of the one or more first portions of node-output information in the pre  
10 assigned time slot of the set of time slots that comprises the communication frame of  
11 the portion of central-output information.

LIT-114/AME 1412

1           7.     (Original) The system of claim 6 in combination with the processorless  
2     central equipment, wherein the processorless central equipment gates the one of the  
3     one or more first portions of node-output information with a clock to obtain the one of  
4     the one or more first portions of node-output information in the pre assigned time slot of  
5     the set of time slots that comprises the communication frame of the portion of central-  
6     output information.

1           8.     (Previously presented) The system of claim 5, wherein the time duration of  
2     the interval is substantially equal to a maximal expected signal-propagation delay  
3     between the processorless central equipment and the plurality of communication nodes  
4     over a respective plurality of operable passages.

1           9.     (Original) The system of claim 5, wherein the time duration of the interval  
2     is less than five percent of the time duration of the communication frame.

1           10.    (Previously presented) The system of claim 5, wherein the interval  
2     comprises a first interval, wherein the first communication node receives from the  
3     processorless central equipment the portion of central-output information in the time slot  
4     of the communication frame within a second interval, and wherein a time duration of the  
5     second interval is substantially small relative to a time duration of the communication  
6     frame.

LIT-114/AME 1412

11. (Currently amended) The system of claim 5, wherein the one of the one or more first portions of node-output information comprises a first one of the one or more first portions of node-output information, and wherein the time slot of the communication frame of the portion of central output information comprises a first time slot of the communication frame of the portion of central-output information; and

wherein the first communication node sends a second one of the one or more first portions of node-output information to the processorless central equipment within the interval before a second time slot of the communication frame of the portion of central-output information; and

wherein the first communication node receives from the processorless central equipment the second one of the one or more first portions of node-output information in the second time slot of the portion of central-output information.

12. (Currently amended) The system of claim 1, wherein the first communication node sends one of the one or more first portions of node-output information to the processorless central equipment; and

wherein the first communication node receives from the processorless central equipment the one of the one or more first portions of node-output information in a time slot of a communication frame of the portion of central-output information; and

wherein the first communication node compares one or more values of the one of the one or more first portions of node-output information with one or more values from the time slot of the communication frame of the portion of central-output information to check correctness of operation of one or more portions of the system.

LIT-114/AME 1412

1           13. (Original) The system of claim 1, wherein the first communication node  
2 processes any one or more of:  
3           the one or more first portions of node-output information; and  
4           the one or more additional portions of node-output information  
5 from the portion of central-output information.

1           14. (Currently amended) The system of claim 1 in combination with a second  
2 communication node of the one or more additional communication nodes, wherein the  
3 second communication node sends one or more of the one or more additional portions  
4 of node-output information to the processorless central equipment, and wherein the  
5 second communication node receives from the processorless central equipment the  
6 portion of central-output information.

1           15. (Original) The system of claim 1, further comprising a fiberoptic passage  
2 of one or more fiberoptic passages that serve to connect the first communication node  
3 with the processorless central equipment, wherein the first communication node sends  
4 the one or more first portions of node-output information to the processorless central  
5 equipment over the fiberoptic passage.

1           16. (Original) The system of claim 1, further comprising a fiberoptic passage  
2 of one or more fiberoptic passages that serve to connect the first communication node  
3 with the processorless central equipment, wherein the first communication node  
4 receives from the processorless central equipment the portion of central-output  
5 information over the fiberoptic passage.

LIT-114/AME 1412

1           17. (Original) The system of claim 1, further comprising a copper passage of  
2 one or more copper passages that serve to connect the first communication node with  
3 the processorless central equipment, wherein the first communication node sends the  
4 one or more first portions of node-output information to the processorless central  
5 equipment over the copper passage.

1           18. (Original) The system of claim 1, further comprising a copper passage of  
2 one or more copper passages that serve to connect the first communication node with  
3 the processorless central equipment, wherein the first communication node receives  
4 from the processorless central equipment the portion of central-output information over  
5 the copper passage.

1           19. (Previously presented) The system of claim 1 in combination with the  
2 processorless central equipment, wherein the processorless central equipment receives  
3 the one or more first portions of node-output information and the one or more additional  
4 portions of node-output information no earlier than an interval before a start of a  
5 communication frame in which the processorless central equipment sends the portion of  
6 central-output information to the plurality of communication nodes, and wherein a time  
7 duration of the interval is substantially small relative to a time duration of the  
8 communication frame.

LIT-114/AME 1412

1           20. (Currently amended) The system of claim 1 in combination with the  
2 processorless central equipment, wherein the processorless central equipment receives  
3 one of the one or more first portions of node-output information within an interval before  
4 a time slot of a communication frame of the portion of central-output information, and  
5 wherein a time duration of the interval is substantially small relative to a time duration of  
6 the communication frame; and

7           wherein the processorless central equipment sends the one of the one or more  
8 first portions of node-output information to the first communication node in the time slot  
9 of the communication frame of the portion of central-output information.

1           21. (Original) The system of claim 1 in combination with the processorless  
2 central equipment, wherein the processorless central equipment within a  
3 communication frame employs the one or more first portions of node-output information  
4 and the one or more additional portions of node-output information to produce the  
5 portion of central output information and sends the portion of central-output information  
6 to the plurality of communication nodes.

1           22. (Original) The system of claim 1 in combination with the processorless  
2 central equipment and the one or more additional communication nodes, wherein the  
3 first communication node, the processorless central equipment, and the one or more  
4 additional communication nodes comprise a time division multiplexing architecture.



LIT-114/AME 1412

1        23. (Currently amended) The system of claim 1 in combination with the  
2 processorless central equipment and a second communication node of the one or more  
3 additional communication nodes;

4        wherein the first communication node sends one of the one or more first portions  
5 of node-output information to the processorless central equipment within an interval  
6 before a first pre-assigned time slot of a first set of time slots that comprises a first  
7 communication frame in which the first communication node receives from the  
8 processorless central equipment the portion of central output information and within the  
9 interval before the first pre assigned time slot of a second set of time slots that  
10 comprises a second communication frame in which the second communication node  
11 receives from the processorless central equipment the portion of central output  
12 information, and wherein the first and second communication frames comprise an  
13 approximately same time duration, wherein a time duration of the interval is  
14 substantially small relative to the approximately same time duration of the first and  
15 second communication frames; and

LIT-114/AME 1412

16 wherein the second communication node sends one of the one or more  
17 additional portions of node-output information to the processorless central equipment  
18 within the interval before a second pre-assigned time slot of the first set of time slots  
19 that comprises the first communication frame in which the first communication node  
20 receives from the processorless central equipment the portion of central output  
21 information and within the interval before the second pre assigned time slot of the  
22 second set of time slots that comprises the second communication frame in which the  
23 second communication node receives from the processorless central equipment the  
24 portion of central output information; and

25 wherein the processorless central equipment gates the one of the one or more  
26 first portions of node-output information with a clock to obtain the one of the one or  
27 more first portions of node output information in the first pre-assigned time slot of the  
28 first set of time slots and in the first pre-assigned time slot of the second set of time  
29 slots; and

30 wherein the processorless central equipment gates the one of the one or more  
31 additional portions of node-output information with the clock to obtain the one of the one  
32 or more additional portions of node-output information in the second pre-assigned time  
33 slot of the first set of time slots and in the second pre-assigned time slot of the second  
34 set of time slots; and

35 wherein the first communication node receives the one of the one or more first  
36 portions of node-output information in the first pre-assigned time slot of the first set of  
37 time slots and the one of the one or more additional portions of node-output information  
38 in the second pre-assigned time slot of the first set of time slots; and

LIT-114/AME 1412

39 wherein the second communication node receives the one of the one or more  
40 first portions of node-output information in the first pre-assigned time slot of the second  
41 set of time slots and the one of the one or more additional portions of node-output  
42 information in the second pre-assigned time slot of the second set of time slots.

1 24. (Currently amended) The system of claim 1, wherein the first  
2 communication node sends one of the one or more first portions of node-output  
3 information to the processorless central equipment in at least a majority of time slots of  
4 a first set of time slots that corresponds to at least a majority of time slots of a second  
5 set of time slots of the portion of central output information; and

6 wherein the first communication node identifies one or more time slots of the  
7 second set of time slots that are assigned to the first communication node through  
8 identification of the one of the one or more first portions of node-output information in  
9 each of the one or more time slots, that are assigned to the first communication node, of  
10 the second set of time slots of the portion of central output information.

1 25. (Previously presented) The system of claim 24, wherein the first  
2 communication node sends the one of the one or more first portions of node-output  
3 information to the processorless central equipment in one or more time slots of the first  
4 set of time slots simultaneously with receipt by the first communication node of one or  
5 more time slots of the second set of time slots of the portion of central output  
6 information.

LIT-114/AME 1412

1           26. (Currently amended) The system of claim 1 in combination with the  
2 processorless central equipment, wherein the first communication node sends one of  
3 the one or more first portions of node-output information to the processorless central  
4 equipment in a time slot, not assigned to the first communication node, the time slot  
5 being of a first set of time slots that corresponds to a time slot, not assigned to the first  
6 communication node, of a second set of time slots of the portion of central output  
7 information; and

8           wherein the processorless central equipment withholds the one of the one or  
9 more first portions of node-output information from the time slot, not assigned to the first  
10 communication node, of the second set of time slots of the portion of central output  
11 information through clock gating of the one or more first portions of node-output  
12 information in the time slot, not assigned to the first communication node, of the first set  
13 of time slots.

1           27. (Original) The system of claim 1 in combination with the processorless  
2 central equipment, wherein the processorless central equipment employs one of the  
3 one or more first portions of node-output information, a clock, and a plurality of flip-flops  
4 to determine a zero or more amount of delay to assert for relative synchronization  
5 between a stable part of the one of the one or more first portions of node-output  
6 information and a clock edge that is employed to produce the portion of central-output  
7 information.

LIT-114/AME 1412

1        28. (Currently amended) The system of claim 1 in combination with the  
2 processorless central equipment, wherein the processorless central equipment  
3 comprises first processorless-central equipment, further comprising a second  
4 processorless-central equipment that is connected with the plurality of communication  
5 nodes; and

6        wherein the portion of central-output information comprises a portion of first  
7 central-output information; and

8        wherein the first communication node sends the one or more first portions of  
9 node-output information to the first processorless-central equipment and to the second  
10 processorless-central equipment, and wherein the one or more additional  
11 communication nodes send the one or more additional portions of node-output  
12 information to the first processorless-central equipment and to the second  
13 processorless-central equipment; and

14        wherein the first communication node receives the portion of first central-output  
15 information from the first processorless-central equipment.

1        29. (Currently amended) The system of claim 28, wherein the first  
2 communication node receives the portion of first central-output information from the first  
3 processorless-central equipment and a portion of second central-output information  
4 from the second processorless-central equipment, and wherein the portion of second  
5 central-output information comprises one or more of:

6        the one or more first portions of node-output information; and

7        the one or more additional portions of node-output information.

LIT-114/AME 1412

1        30. (Original) The system of claim 29, wherein the first communication node  
2 processes information generated during operation of the first communication node to  
3 select a first subportion of the portion of first central-output information for employment  
4 by the first communication node and a second subportion of the portion of the second  
5 central-output information for employment by the first communication node.

1        31. (Currently amended) The system of claim 28, wherein the first  
2 communication node sends one of the one or more first portions of node-output  
3 information to the first processorless-central equipment in a time slot that corresponds  
4 to a time slot of a first set of time slots that comprises a first communication frame in  
5 which the first communication node receives from the first processorless-central  
6 equipment the portion of first central-output information; and

7        wherein the first communication node sends the one of the one or more first  
8 portions of node-output information to the second processorless-central equipment in a  
9 time slot that corresponds to a time slot of a second set of time slots that comprises a  
10 second communication frame in which the first communication node receives from the  
11 second processorless-central equipment a portion of second central-output information;  
12 and

LIT-114/AME 1412

13 wherein the first communication node receives a portion of information from the  
14 first processorless-central equipment in the time slot of the first set of time slots; and  
15 wherein the first communication node receives a portion of information from the  
16 second processorless-central equipment in the time slot of the second set of time slots;  
17 and  
18 wherein the first communication node compares one or more values of the one of  
19 the one or more first portions of node-output information with one or more values of the  
20 portion of information from the first processorless-central equipment in the time slot of  
21 the first set of time slots and with one or more values of the portion of information from  
22 the second processorless-central equipment in the time slot of the second set of time  
23 slots to select either the portion of first central-output information or the portion of  
24 second central-output information for employment by the first communication node in  
25 conjunction with the time slot of the first set of time slots and in conjunction with the time  
26 slot of the second set of time slots.

LIT-114/AME 1412

1        32. (Currently amended) The system of claim 1 in combination with a  
2 maintenance node of one or more maintenance nodes of the one or more additional  
3 communication nodes, wherein the maintenance node receives from the processorless  
4 central equipment the portion of central-output information, and wherein the  
5 maintenance node monitors the one or more first portions of node-output information  
6 and the one or more additional portions of node-output information from the portion of  
7 central-output information to check correctness of operation of one or more portions of  
8 the system, and wherein the maintenance node sends one or more report portions, of  
9 the one or more additional portions of node-output information, to the processorless  
10 central equipment.

1        33. (Currently amended) The system of claim 1 in combination with the  
2 plurality of communication nodes, wherein each of the plurality of communication nodes  
3 sends a corresponding one or more portions of node-output information to the  
4 processorless central equipment, and wherein each of the plurality of communication  
5 nodes receives from the processorless central equipment the portion of central-output  
6 information, and wherein the portion of central-output information comprises all the  
7 portions of node-output information.

1        34. (Currently amended) A method, comprising the steps of:



LIT-114/AME 1412

2        sending one or more first portions of node-output information to processorless  
3        central equipment from a first communication node of a plurality of communication  
4        nodes connected with the processorless central equipment, wherein one or more  
5        additional communication nodes of the plurality of communication nodes send one or  
6        more additional portions of node-output information to the processorless central  
7        equipment, and wherein the first communication node has one or more instances of a  
8        data interface and a video interface is not limited to a telephone, and wherein the first  
9        communication node and the processorless central equipment communicate through  
10       employment of a time division multiplexing format; and

11       receiving at the first communication node a portion of central-output information  
12       from the processorless central equipment, wherein the portion of central-output  
13       information comprises the one or more first portions of node-output information and the  
14       one or more additional portions of node-output information.

LIT-114/AME 1412

1           35. (Previously presented) The method of claim 34, wherein the step of  
2 sending the one or more first portions of node-output information to the processorless  
3 central equipment from the first communication node of the plurality of communication  
4 nodes connected with the processorless central equipment and the step of receiving at  
5 the first communication node the portion of central-output information from the  
6 processorless central equipment comprise the steps of:

7           selecting a time duration of an interval to be approximately equal to a maximal  
8 expected signal-propagation delay between the processorless central equipment and  
9 the plurality of communication nodes over a respective plurality of operable passages;

10          sending one of the one or more first portions of node-output information to the  
11 processorless central equipment from the first communication node within the interval  
12 before a time slot of a communication frame of the portion of central-output information,  
13 wherein a time duration of the interval is substantially small relative to a time duration of  
14 the communication frame; and

15          receiving at the first communication node the one of the one or more first portions  
16 of node-output information in the time slot of the communication frame of the portion of  
17 central-output information from the processorless central equipment.

LIT-114/AME 1412

1           36. (Original) The method of claim 34, wherein the step of sending the one or  
2 more first portions of node-output information to the processorless central equipment  
3 from the first communication node of the plurality of communication nodes connected  
4 with the processorless central equipment and the step of receiving at the first  
5 communication node the portion of central-output information from the processorless  
6 central equipment comprise the steps of:

7           sending a corresponding one or more portions of node-output information to the  
8 processorless central equipment from each of the plurality of communication nodes; and  
9           receiving at each of the plurality of communication nodes the portion of central-  
10 output information from the processorless central equipment, wherein the portion of  
11 central-output information comprises all the portions of node-output information.

1           37. -- 39. (Canceled)

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**